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BIRCH STEWART KOLASCH & BIRCH LLP
P O BOX 747
FALLS CHURCH, VA 220400747

EXAMINER

PATEL, GAUTAM

ART UNIT PAPER NUMBER

2653

DATE MAILED: 09/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/480,107

Applicant(s)

Park

Examiner

Gautam R. Patel

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 8, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

RCE STATUS

1. The request filed on 8-8-02 for Request for continued Examination (RCE) under 37 CFR 1.114 based on parent Application is acceptable and a RCE has been established. An action on the RCE follows.
2. Claims 1-23 are pending for the examination.

OBJECTION TO NEW MATTER ADDED TO THE SPECIFICATION

3. The amendment filed on 2-4-02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure [added new matter is underlined] is as follows:
DMA is reset (step 603) to a predetermined reset value; and
spare area may be converted to a predetermined reset value which may be the lowest value or the highest value; and thereby erasing any previously stored address information, are added to the specification and to the claims.

NOTE: original specification discloses that "location information values of the supplementary spare area may be converted to the lowest value or the highest value". Now new matter is added that "location information values of the supplementary spare area may be converted to a predetermined reset value which may be the lowest value or the highest value. In other words, location information could be anything in between

the highest value and lowest value. This aspect is clearly new and gives new and much broader and different input to the specification on page 12 of the specification.

Applicant is required to cancel the new matter in the reply to this Office action.

Claim Rejections - 35 U.S.C. § 112

4. Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The added material which is not supported by the original disclosure: such as DMA is reset to a "predetermined reset value" and thereby erasing any previously stored address information is not mentioned at all in the original specification or explained such that one of ordinary skill in the art would have been able to use it.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 7-19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bish et al., US. patent 5,235,585 (hereafter Bish).

As to claim 1, Bish discloses the invention as claimed [see Figs. 1-9] including resetting a location information of spare area and converting spare area to user area, comprising the steps of:

- a. resetting [by doing surface analysis] the stored location information of a supplementary [secondary] spare area to a predetermined reset value [Bish's 'predetermined reset value' is null value or zero value] in response to formatting request [col. 4, lines 15-39; and col. 5, line 54 to col. 6, line 13]; and
- b. formatting the optical recording medium in response to the formatting request [col. 5, line 54 to col. 6, line 13; specifically col. 5, lines 54-61];

6. As to claim 2, Bish discloses:

determining if a supplementary spare area has been assigned [surface analysis] prior to said resetting step (a) and said formatting step (b), wherein said steps (a) and (b) are performed if a supplementary spare area has been assigned [col. 5, line 43 to col. 6, line 24 and col. 9, line 54 to col. 10, line 45].

7. As to claim 3, Bish discloses:

said resetting step (a) comprises converting the location information [address] of the supplementary spare area to predetermined reset value, thereby erasing [col. 6, lines 2-3] any previously stored location information [col. 5, line 65 to col. 6, line 13 and col. 9, line 54 to col. 10, line 45].

8. As to claim 4, Bish discloses:

the predetermined value is a lowest value [col. 6, lines 25-30].

9. As to claim 7, Bish discloses:

said formatting step (b) includes registering sectors judged to have defects into a new PDL (primary defect list), if the optical recording medium s to be formatted with certification [validation] [col. 9, line 52 to col. 10, line 45 and fig. 9].

10. As to claim 8, Bish discloses:

said formatting step (b) includes registering all sectors previously registered in an old SDL (secondary defect list) into new PDL, if the optical recording medium is to be formatted without certification [validation] [col. 9, line 52 to col. 10, line 45 and fig. 9].

11. As to claim 9, Bish discloses:

the location information of the supplementary spare area is stored in a SDL block [fig. 4] of a DMA of the optical recording medium [col. 6, lines 25-61]

12. As to claim 10, Bish discloses:

the location information includes start [start-pointer] and end [end-pointer] addresses of the supplementary spare area on the recording medium [col. 9, line 40 to col 10, line 8].

13. As to claim 11, Bish discloses:

said formatting step (b) further includes disposing an old SDL existed prior to said formatting step (b), if the optical recording medium is to be formatted with certification [validation] [col. 9, line 40 to col 10, line 8].

14. As to claim 12, Bish discloses:

said formatting step (b) reformats the optical recording medium by moving defective sectors registered in a first list to a second list [col. 9, line 52 to col. 10, line 45 and fig. 9].

15. As to claim 13, Bish discloses:

the first list and second list are, respectively, an SDL (secondary defect list) and a PDL (primary defect list) for the optical recording medium [col. 9, line 52 to col. 10, line 45 and fig. 9].

16. As to claim 14, Bish discloses:

- a. Receiving an instruction to format the recording medium [col. 5, lines 54-64];
- b. Resetting a location information stored on the recording medium in response to the instruction [col. 5, line 54 to col. 6, line 24]; and
- c. Transferring secondary defect information with a new PDL to format the recording medium according to instruction [col. 5, line 54 to col. 6, line 24; and col. 6, line 62 to col. 7, line 6].

17. As to claim 15, Bish discloses:

registering sectors judged to have defects into new PDL if the recording medium is to be formatted with certification [col. 3, lines 42-54; col. 5, line 65 to col. 6, line 12 and col. 7, line 47 to col. 8, line 30].

18. As to claim 16, Bish discloses:

disposing an old SDL of the secondary defect information if the recording medium is to be formatted with certification [col. 7, lines 7-46]

19. As to claim 17, Bish discloses:

registering all sectors previously registered in an old SDL of secondary defect information into the new PDL if the recording medium is to be formatted without certification [col. 9, line 52 to col. 10, line 45 and fig. 9].

20. As to claim 18, Bish discloses:

the location information of the supplementary spare area is stored in a SDL blocks of a DMA of the recording medium [col. 6, line 31 to col. 7, line 26 and fig. 4]

21. As to claim 19, Bish discloses:

the location information includes start [start-pointer] and end [end-pointer addresses of the supplementary spare area on the recording medium [col. 9, line 40 to col 10, line 8].

Claim Rejections - 35 U.S.C. § 103

22. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

23. Claims 5-6, 22-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Bish as applied to claims 1-4 and 7-19 above.

Regarding claims 5-6, Bish discloses that the predetermined value is a lowest value [col. 6, lines 25-30], or sectors are listed in ascending order. Bish does not specifically disclose that the predetermined value is a highest value or predetermined value is a specific code based upon a predetermined agreement. The limitation in claims 5-6 do not define a patentable distinct invention over that in Bish, since both the invention as a whole and Bish are directed to assigning the sectors in order they are available and choose sectors which are near to the original sector thus keeping track movement to minimum for saving time. The value that is chosen highest, lowest or some predetermined value is inconsequential for the invention as a whole and presents no new or unexpected results, so long as the supplementary spare area is reset and used again. Also Bish clearly indicates that -- "the replacement list has been sorted in

the ascending order, but it will be appreciated that the replacement list may be sorted in other orders, for example, descending order.” [col. 10, lines 57-60]. Therefore, to have predetermined value to be highest, lowest or based on specific code in Bish would have been routine experimentation and optimization as taught by Bish, in the absence of criticality.

24. Regarding claims 22-23, Bish discloses the transferring and resetting steps. Bish also discloses that sectors are listed in ascending order according to track and sector numbers [see col. 6, lines 25-30]. Bish does not specifically disclose that the resetting step is performed first or second as compared to transferring step. The limitations in claims 22 and 23 do not define a patentable distinct invention over that in Bish since both the invention as a whole and Bish are directed to assigning the sectors in order they are available and choose sectors which are near to the original sector thus keeping track movement to minimum for saving time. The order in which the transferring or resetting takes place presents no new or unexpected results. Also Bish clearly indicates that “the replacement list has been sorted in the ascending order, but it will be appreciated that the replacement list may be sorted in other orders, for example, descending order. [col. 10, lines 57-60]. Therefore, to have any order in which to transferring and resetting steps are done in Bish would have been routine experimentation and optimization as taught by Bish, in the absence of criticality.

Bish was cited as prior art reference in paper no. 3, mailed 10-3-01.

25. Applicant's arguments filed on 8-8-02 (Paper # 9) have been fully considered but they are not deemed to be persuasive for the following reasons.
26. In the REMARKS, the Applicant argues as follows:

A) That: "Instead, the specification has been amended to specify that the location information is reset to a predetermined reset value. This is fully supported by the original disclosure, e.g., page 12, line 12 - page 13, line 1 of the original specification where resetting of location information to a certain reset value is discussed." [page 6; para. 3; REMARKS].

FIRST: As to claims 1-23 **new matter** was introduced. See rejection 112 first, supra.

SECOND: careful inspection of original specification shows that: specification [12, line 12 - page 13, line 1] clearly indicated that original spare area may be converted to the lowest value or the highest value [only]. Now new matter added that "spare area may be converted to "a predetermined reset value" which may be the lowest value or the highest value [or which may not be]. In other words spare area could be anything in between the highest value and lowest value. This aspect is clearly new and gives new and much broader and different input to the specification. Also this aspect was NOT disclosed at all in the original specification before.

B) That: "the Examiner's's allegations made in connection with this rejection, in view of the cancellation of the objected materia, this rejection is moot and reconsideration and withdrawal of the rejection based on these reasons is respectfully requested.." [page 7, para. 1; REMARKS].

The Applicants have removed old "new matter", however have introduced new "new matter", which is not disclosed in the specification at all. Please see paragraph 3 and 4, supra.

C) That : "Bish et al. is absolutely silent on resetting the stored location information of a supplementary spare area to a predetermined reset value. In response to a formatting request as in Applicants's claimed invention [page 8, para. 1; REMARKS].

FIRST: see new rejection above.

SECOND: see paragraphs 3-4, regarding new matter above.

D) That: "in step 603, ... the location information ... of a supplementary spare are recorded on the recording medium is reset to a predetermined reset value [emphasis added].

Careful examination of step 603 in figure 6 shows, that it only discloses: "Resetting location information of supplementary spare area recorded in DMA". The step 603 does NOT say anything about reset to a predetermined reset value at all.

E) That : " that these portions of Bish et al., teach registering replacement sectors in a replacement sector list, and not registering sectors registered in an old SDL into a new PDL," [page 9, para. 1; REMARKS].

Bish clearly discloses these aspects. Bish is not using exact same words, but he is doing the same thing. Bish clearly indicates that, "If an entry is found, then it is already assigned as a replacement sector for a previously found secondary defect, [i.e., old SDL {secondary defect list}], and control is transferred to step 101 where that entry value is incremented. [col. 10, lines 1-8; also see fig. 9].

F) That: " there is no motivation to modify Bish to render the claimed invention obvious because Bish is not at all concerned with (1) inconsistencies created during a reformatting process of recording medium between a driver a file system and (2) incompatible recording by different drivers." [page 9, para. 2; REMARKS].

First: Motivation for modifying Bish has been given [see para. 23-24 above].

SECOND: These aspects of -- inconsistencies created during a reformatting process of recording medium between a driver a file system and incompatible recording by different drivers-- are NOT claimed.

Contact information

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. William Korzuch, can be reached on (703) 305-6137.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.



Gautam R. Patel
Patent Examiner
Group Art Unit 2653



August 24, 2002